



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
[www.uspto.gov](http://www.uspto.gov)

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/043,325	01/14/2002	Young-Won Song	HI-0070	6678
34610	7590	03/01/2005	EXAMINER	
FLESHNER & KIM, LLP P.O. BOX 221200 CHANTILLY, VA 20153			BHATIA, AJAY M	
		ART UNIT		PAPER NUMBER
		2145		

DATE MAILED: 03/01/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

lu

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	10/043,325	SONG ET AL.	
	<b>Examiner</b>	<b>Art Unit</b>	
	Ajay M Bhatia	2145	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) Responsive to communication(s) filed on 14 January 2002.  
 2a) This action is FINAL.                    2b) This action is non-final.  
 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) Claim(s) 1-22 is/are pending in the application.  
 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.  
 5) Claim(s) \_\_\_\_\_ is/are allowed.  
 6) Claim(s) 1-22 is/are rejected.  
 7) Claim(s) \_\_\_\_\_ is/are objected to.  
 8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) The specification is objected to by the Examiner.  
 10) The drawing(s) filed on \_\_\_\_\_ is/are: a) accepted or b) objected to by the Examiner.  
     Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
     Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  
 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
 a) All    b) Some \* c) None of:  
 1.) Certified copies of the priority documents have been received.  
 2.) Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
 3.) Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)                     |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | Paper No(s)/Mail Date. _____  |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
|  | 6) <input type="checkbox"/> Other: _____                                    |

1. Due to applicants multiple 112 2<sup>nd</sup> issues and confusing claim limitation examiner interpreted claims the best of his ability to understand the limitation of the provided claims as disclosed by the applicant.

***Priority***

2. Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

***Specification***

3. Applicant is reminded of the proper language and format for an abstract of the disclosure.

The abstract should be in narrative form and generally limited to a single paragraph on a separate sheet within the range of 50 to 150 words. It is important that the abstract not exceed 150 words in length since the space provided for the abstract on the computer tape used by the printer is limited. The form and legal phraseology often used in patent claims, such as "means" and "said," should be avoided. The abstract should describe the disclosure sufficiently to assist readers in deciding whether there is a need for consulting the full patent text for details.

4. The abstract of the disclosure is objected to because abstract is 2 paragraphs.

Correction is required. See MPEP § 608.01(b).

5. A substitute specification in proper idiomatic English and in compliance with 37 CFR 1.52(a) and (b) is required. The substitute specification filed must be accompanied by a statement that it contains no new matter.

***Claim Rejections - 35 USC § 101***

35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

Claims 1-22 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter. "A method of generating" does not provide for a change of state or transformation of physical matter.

***Claim Objections***

6. Claims 1-22 objected to because of the following informalities: Digital Item is not a proper noun so it does not need to be capitalized. Appropriate correction is required.

***Claim Rejections - 35 USC § 112***

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

7. Claims 1-22 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

The claims are generally narrative and indefinite, failing to conform with current U.S. practice. They appear to be a literal translation into English from a foreign document and are replete with grammatical and idiomatic errors.

Claims 1-22 rejected under 35 U.S.C. 112, second paragraph, as being incomplete for omitting essential structural cooperative relationships of elements, such omission amounting to a gap between the necessary structural connections. See MPEP § 2172.01. The omitted structural cooperative relationships are: applicant fails to clear define the relationship between item container and component and there relationship to the digital item, types of components or items do not provided any clear definition to as the content of those types of objects.

***Claim Rejections - 35 USC § 102***

8. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

9. Claims 1, 2, 21, and 22 are rejected under 35 U.S.C. 102(e) as being anticipated by Vestergaard et al. (U.S. Patent 2002/0146122 referred to a Vestergaard).

10. For claim 1, Vestergaard teaches, a method of generating Digital Item for electronic commerce activities of multimedia data, comprising the steps of:  
selecting resource for electronic commerce activities of multimedia data; and

generating Digital Item as the unit of manipulation of electronic commerce activities for a corresponding multimedia resource defined by including anchor for designating a selected resource, descriptor for describing a corresponding item, and opCondition for describing operational use conditions of the corresponding item. (See Vestergaard, paragraphs 129, 147, 132, and 139, since no clear definition of Digital Item is provided in the claim Digital Item is interpreted as a type of data structure as depicted in figure 5)

11. For claim 2, Vestergaard teaches, the method according to claim 1, wherein the step of generating Digital Item as the unit of manipulation of electronic commerce activities for a corresponding multimedia resource is defined to include selectively murCondition for describing conditions related to commercial management and use rule for the corresponding item, eventReport for describing event to be reported in connection with the corresponding item, userPreference for describing user preference information on the corresponding item, or reservedMetadata for describing metadata additionally required for Digital Item definition model in the future. (See Vestergaard, paragraphs 151-155 and 132)

12. For claim 21, Vestergaard teaches, a method of generating Digital Item for electronic commerce activities of multimedia data, comprising the steps of: selecting resource for electronic commerce activities of multimedia data; and

generating container, item and component as Digital Items in order to provide a selected resource as the unit of manipulation for electronic commerce activities according to the following element definitions:

- (a) container::=(anchor|container)\* (anchor|item)\* descriptor\* murCondition\* eventReport\* userPreference\* reservedMetadata\*
  
- (b) item::=(anchor|item|component)+choice\* descriptor\* murCondition\* eventReport\* userPreference\* reservedMetadata\*
  
- (c) component::=resource anchor descriptor\* murCondition\* opCondition\* eventReport\* userPreference\* reservedMetadata\*
  
- (d) anchor::=reference descriptor\* opCondition\*
  
- (e) descriptor::=(anchor|descriptor)\* (component|statement) opCondition\*
  
  
- (f) choice::=choice\* selection+descriptor\* opCondition\*
  
  
- (g) selection::=predicate descriptor\* opCondition\*
  
  
- (h) eventReport::=anchor descriptor murCondition

(i) userPreference::=anchor descriptor murCondition

(j) reservedMetadata::=anchor descriptor murCondition

(k) murCondition::=predicate+

(l) opCondition::=predicate+

(applicant fails to provide definitions for \*, |, or +, therefore examiner used definition provided in light of the specification on page 10 lines 1-5 of application, which disclose the '\*' means at least zero(0) or more, '+' means at least one(1) or more, and '|' means 'OR' logical operation, hence a \* are treaded as zero and a container nothing, a container= (nothing) item = (anchor|item|component)+ and component=resource anchor) (See Vestergaard, paragraphs 129, 147, 132, 139-140, 151-155, and figure 5, component is contained in the base mp3 encrypted content of the MPE file and in paragraphs 139 and 140, item is the audio content with the URL as the anchor as describe in paragraph 147, container can be clear seen in figure 5)

***Claim Rejections - 35 USC § 103***

13. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

14. Claims 3-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Vestergaard in view of Chouraki et al. (U.S. Patent 5,594,792).

15. For claim 3, Vestergaard teaches, the method according to claim 1, wherein the Digital Item consists of the lowest atomic Digital Item which is not divided into any longer and packaged Digital Item, (See Vestergaard, paragraphs 129, 147, 132, 139, and 151-155)

Vestergaard fails to clearly disclose, wherein the packaged Digital Item is defined to include any sub packaged Digital Item in a recurrent package form that the atomic Digital Items are packaged or already packaged Digital Items are again packaged, therefore each packaged Digital Item is generated in a recursive manner.

Chouraki teaches, wherein the packaged Digital Item is defined to include any sub packaged Digital Item in a recurrent package form that the atomic Digital Items are packaged or already packaged Digital Items are again packaged, therefore each packaged Digital Item is generated in a recursive manner. (See Chouraki, Col. 9 lines 25-45)

It would have been obvious to one of ordinary skill in the art at the time of the invention was made to generate the object of Vestergaard's system according to Chouraki's method of creating recursive multilayer objects in order to simplify and reduce the amount of code used to traverse the structure of the object. (See Chouraki, Col. 9 lines 15-25)

16. For claim 4, Vestergaard-Chouraki teaches, the method according to claim 3, wherein the packaged Digital Item is defined to include information (anchor) for designating same level of Digital Item or information (anchor) for designating lower level of Digital Item. (See Vestergaard, paragraphs 147, 139)

The same motivation that was utilized in the rejection of claim 3, applies equally as well to claim 4.

17. For claim 5, Vestergaard-Chouraki teaches, the method according to claim 3, wherein in order to construct the recurrent layered structure, the atomic Digital Item as the lowest layer is defined as component, packaged Digital Item as the middle layer including the component or any sub packaged Digital Item is defined as item, and packaged Digital Item as the highest layer including item or any sub container is defined as container. (See Chouraki, Col. 9 lines 25-45) and (See Vestergaard, paragraphs 129, 147, 132, 139, and 151-155)

The same motivation that was utilized in the rejection of claim 3, applies equally as well to claim 5.

18. For claim 6, Vestergaard-Chouraki teaches, the method according to claim 3, wherein in order to construct the recurrent layered structure, the atomic Digital Item as the lowest layer is defined as component, packaged Digital Item as the middle layer including the component or any sub packaged Digital Item or information (anchor) for designating that is defined as item, and packaged Digital Item as the highest layer including item or any sub container or information (anchor) for designating that is defined as container. (See Chouraki, Col. 9 lines 25-45) and (See Vestergaard, paragraphs 129, 147, 132, 139, and 151-155)

The same motivation that was utilized in the rejection of claim 3, applies equally as well to claim 6.

19. For claim 7, Vestergaard-Chouraki teaches, a method of generating Digital Item for electronic commerce activities of multimedia data, comprising the steps of:  
selecting resource for electronic commerce activities of multimedia data;  
generating component defined to include a selected resource, anchor for designating the selected resource, descriptor for describing details of the resource, opCondition for describing operational use conditions of the resource;

generating item defined to include packaged content including at least one component or item or anchor for designating that, choice for the packaged content, descriptor for describing details of the packaged content; and

generating container defined to include packaged content including at least one item or container or anchor for designating that, descriptor for describing details of the packaged content. (See Chouraki, Col. 9 lines 25-45) and (See Vestergaard, paragraphs 129, 147, 132, 139, and 151-155)

20. For claim 8, Vestergaard-Chouraki teaches, the method according to claim 7, wherein the step of generating component is defined to include selectively murCondition for describing conditions related to management and use rule for the resource, eventReport for describing event to be reported in connection with the resource, userPreference for describing user preference information on the resource, or reservedMetadata for describing metadata additionally required for Digital Item definition model in the future. (See Chouraki, Col. 9 lines 25-45) and (See Vestergaard, paragraphs 129, 147, 132, 139, and 151-155)

21. For claim 9, Vestergaard-Chouraki teaches, the method according to claim 7, wherein the step of generating item is defined to include selectively murCondition for describing conditions related to management and use rule for the package content,

eventReport for describing event to be reported in connection with the package content, userPreference for describing user preference information on the package content, or reservedMetadata for describing metadata additionally required for Digital Item definition model in the future. (See Chouraki, Col. 9 lines 25-45) and (See Vestergaard, paragraphs 129, 147, 132, 139, and 151-155)

The same motivation that was utilized in the rejection of claim 3, applies equally as well to claim 9.

22. For claim 10, Vestergaard-Chouraki teaches, the method according to claim 7, wherein the step of generating container is defined to include selectively murCondition for describing conditions related to management and use rule for the package content, eventReport for describing event to be reported in connection with the package content, userPreference for describing user preference information on the package content, or reservedMetadata for describing metadata additionally required for Digital Item definition model in the future. (See Chouraki, Col. 9 lines 25-45) and (See Vestergaard, paragraphs 129, 147, 132, 139, and 151-155)

The same motivation that was utilized in the rejection of claim 3, applies equally as well to claim 10.

23. For claim 11, Vestergaard-Chouraki teaches, the method according to claim 7, wherein the choice is defined to include recurrent form of at least zero(0) or more choice, at least zero(0) or more descriptor, at least zero(0) or more opCondition that can be used to determine whether a single selection is selected or more than one selection are selected, and at least one(1) or more selection as the object of selection. (See Chouraki, Col. 9 lines 25-45) and (See Vestergaard, paragraphs 129, 147, 132, 139, 163 and 151-155)

The same motivation that was utilized in the rejection of claim 3, applies equally as well to claim 11.

24. For claim 12, Vestergaard-Chouraki teaches, the method according to claim 11, wherein the selection is defined to include predicate which is Boolean function representation language, at least zero(0) or more descriptor for describing the content of the selection, and opCondition for describing operational use conditions of the selection, as elements included to define the choice. (See Chouraki, Col. 9 lines 25-45) and (See Vestergaard, paragraphs 129, 147, 132, 139, 163 and 151-155)

The same motivation that was utilized in the rejection of claim 3, applies equally as well to claim 12.

25. For claim 13, Vestergaard-Chouraki teaches, the method according to claim 7, wherein the choice is used for item level for the purpose of selective item configuration in order to adapt the Digital Item according to the various types of networks and terminals, or the user request, and wherein the choice is modeled in a recurrent form considering the user generally configures item through multi-steps, so layered definition of choice is required. (See Chouraki, Col. 9 lines 25-45) and (See Vestergaard, paragraphs 45, 129, 147, 132, 139, 163 and 151-155)

The same motivation that was utilized in the rejection of claim 3, applies equally as well to claim 13.

26. For claim 14, Vestergaard-Chouraki teaches, the method according to claim 7, wherein descriptor used for all the Digital Items, choice, selection, eventReport, userPreference, reservedMetadata, and anchor, is defined to include at least zero(0) or more existing descriptor or anchor, component capable of representing the content of descriptor or statement of text or any machine readable format for describing the content such as parent elements of descriptor to be defined, and at least zero(0) or more opCondition of describing operational conditions of descriptor. (See Chouraki, Col. 9 lines 25-45) and (See Vestergaard, paragraphs 129, 147, 132, 139, 163 and 151-155)

The same motivation that was utilized in the rejection of claim 3, applies equally as well to claim 14.

27. For claim 15, Vestergaard-Chouraki teaches, the method according to claim 7, wherein anchor used for all Digital Items, eventReport, userPreference, reservedMetadata, and descriptor, is defined to include a reference being an identifier designating uniquely atomic Digital Item and each Digital Item, at least zero(0) or more descriptor for describing the anchor, and at least zero(0) or more opCondition for describing usage format of the anchor. (See Chouraki, Col. 9 lines 25-45) and (See Vestergaard, paragraphs 129, 147, 132, 139, 163 and 151-155)

The same motivation that was utilized in the rejection of claim 3, applies equally as well to claim 15.

28. For claim 16, Vestergaard-Chouraki teaches, the method according to claim 7, wherein eventReport is defined to include anchor for designating a server computer for processing, managing and storing the content of reportable event report, descriptor for describing the content of event report, and murCondition for describing conditions related to management and use rule of event report content. (See Chouraki, Col. 9 lines 25-45) and (See Vestergaard, paragraphs 129, 147, 132, 139, 163 and 151-155)

The same motivation that was utilized in the rejection of claim 3, applies equally as well to claim 16.

29. For claim 17, Vestergaard-Chouraki teaches, the method according to claim 7, wherein UserPreference is defined to include anchor for designating the existing user preference information, descriptor for describing the content of user preference information, and murCondition capable of describing management and use rule of the user preference information. (See Chouraki, Col. 9 lines 25-45) and (See Vestergaard, paragraphs 129, 147, 132, 139, 163 and 151-155)

The same motivation that was utilized in the rejection of claim 3, applies equally as well to claim 17.

30. For claim 18, Vestergaard-Chouraki teaches, the method according to claim 7, wherein murCondition used for all the Digital Items, eventReport, userPreference, and reservedMetadata defines conditions for management and use rule of a corresponding Digital Item or definition model elements by use of at least one(1) or more predicate which is Boolean function representation language. (See Chouraki, Col. 9 lines 25-45) and (See Vestergaard, paragraphs 47, 48 , 94-100, 129, 147, 132, 139, 163 and 151-155)

The same motivation that was utilized in the rejection of claim 3, applies equally as well to claim 18.

31. For claim 19, Vestergaard-Chouraki teaches, the method according to claim 7, wherein opCondition used for Digital Item of component level, descriptor, anchor, choice and selection defines operational use conditions for a corresponding item or definition model elements by use of at least one(1) or more predicate which is Boolean function representation language. (See Chouraki, Col. 9 lines 25-45) and (See Vestergaard, paragraphs 47, 48 , 94-100, 129, 147, 132, 139, 163 and 151-155)

The same motivation that was utilized in the rejection of claim 3, applies equally as well to claim 19.

32. For claim 20, Vestergaard-Chouraki teaches, the method according to claim 19, wherein the opCondition describes conditions, for example transmission bit rate, resolution of video or image, sampling rate of audio, compression algorithm, key or decoding conditions if coded, transmission protocol, etc. (See Chouraki, Col. 9 lines 25-45) and (See Vestergaard, paragraphs 47, 48 , 94-100, 129, 147, 132, 139, 163 and 151-155)

The same motivation that was utilized in the rejection of claim 3, applies equally as well to claim 20.

33. Claim 22 is rejected under 35 U.S.C. 103(a) as being unpatentable over Vestergaard et al. (U.S. Patent 2002/0146122 referred to a Vestergaard).

34. For claim 22, Vestergaard fails to clearly disclose, the method according to claim 21, wherein '\*' means at least zero(0) or more, '+' means at least one(1) or more, and '|' means 'OR' logical operation.

It is well known in the art to use, the method according to claim 21, wherein '\*' means at least zero(0) or more, '+' means at least one(1) or more, and '|' means 'OR' logical operation.

It would have been obvious to one of ordinary skill in the art at the time of the invention was made to use the '\*' '+' '\' to represent 0 or more, 1 or more, and the logical operator OR, in order to readily translate the algorithm into a computer program by clearly defining objects using standard digital logic practices.

### ***Conclusion***

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

1. US-6,732,106 by Okamoto et al.
2. US-5,983,176 by Hoffert et al.
3. US-2003/0028796 by Roberts et al.
4. US-5,504,906 by Lutoff, Daniel
5. US-5,579,316 by Venters et al.
6. US-6,327,652 by England et al.

7. US-6,463,571 by Morgan, David A.
8. US-2001/0036356 by Weaver et al.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ajay M Bhatia whose telephone number is (571)-272-3906. The examiner can normally be reached on M-F 8:30 am - 5:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Valencia M Wallace can be reached on (571)-272-6159. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

AB

*V. Martin-Wallace*  
VALENCIA MARTIN-WALLACE  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 2700